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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,725	09/29/2003	Ayumu Murakami	02910.000091.	6720

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EXAMINER	
SARPONG, AKWASI	
ART UNIT	PAPER NUMBER
2625	

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02/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/671,725	MURAKAMI, AYUMU	
	Examiner	Art Unit	
	AKWASI M. SARPONG	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/03/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892) ✓
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓ Paper No(s)/Mail Date *11/26/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

DETAILED ACTION

Drawings

The drawings are objected to because the drawings do not show any labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (US 6628431 B1) in view of Tsunoda (US 4862218) and in further in view of Tanaka (6053653).

Claim 1, Masuda discloses an image reading apparatus (Fig.1, Abstract, Line 1) comprising:

an original placement portion on which an original is to be placed (Column 1, Line 19, Fig. 18B Element 161).

optical unit (**Light source unit**) configured to move relative to the original placement portion. (Column 3, Lines 56 – 62, Fig. 23 Element 369, 361 and 373-thus the optical unit moves while scanning and therefore it is configured to move).

a guide member that guides movement of the optical (Fig 4A, Elem. 12).

wherein said optical unit includes a sliding member (Column 7, Lines 58-66, Fig. 4, Element 22b).

Masuda discloses using a spring portion as a contact member that slides in contact with the guide member (Fig 4A, Element 24).

Masuda does not discloses having a screw portion that slides in contact with the guide member and a screw hole portion to which the sliding member is mounted, the screw portion of the sliding member being plastically deformable and screwed into the screw hole portion while being plastically deformed.

Tasunoda discloses a conventional image reader with a screw portion (Fig. 12 Element 119) that slides in contact with the guide member and a screw hole portion (Fig. 12 Element 118) to which the sliding member is mounted.

Tasunoda does not disclose a screw portion of the sliding member being plastically deformable and screwed into the screw hole portion while being plastically deformed.

Tanaka discloses a screw portion of the sliding member being plastically deformable and screwed into the screw hole portion while being plastically deformed (Column 3 Lines 1-12). Therefore it will be obvious to one ordinary skilled in the art at the time of the invention was made to modify Masuda's spring portion with a screw portion and a screw hole portion being plastically deformable, as taught by Tasundo and Tanaka, so to prevent movement during scanning process.

Claim 2, Masuda (Column 6 Lines 28-31 and Lines 41-53, Fig 4, Element 24) in view of Tanaka (Column 4 Lines 53-61) further discloses wherein play between the screw portion and the screw hole portion is substantially eliminated by plastic deformation of said screw portion.

Claim 3, " wherein said screw portion is provided with a plurality of plastically deformable portions that are arranged circumferentially," reads on Tsunoda's adjusting portion. (Fig 11, Element 111).

Claim 4, "wherein said screw portion is provided clear of a tip end portion of said sliding member" reads on that Tsunoda's screw (Fig.10, Element 119) and Tanaka's screw (Fig. 3 Element 35 Column 4 Lines 52-61) clearly shows the tip end portion.

Claim 5, Masuda (Column 6, Lines 22-29) in view of Tsunoda (Column 10, Lines 4-7 Fig.12 Element 119) further discloses wherein said sliding member has an engagement portion to which a rotating tool is to engage.

Claim 6, Masuda (Column 6, Lines 31-33) in view of Tsunoda discloses wherein said screw portion is made of a resin material.

Claim 7, Masuda (Column 6, Lines 31-33 and 59-64) discloses wherein a sliding portion and the screw portion of said sliding member are an integrally molded resin part.

Claim 8, Masuda (Column 2, Lines 51-59-Fig. 4A shows clearly that the sliding members 21 and 22b and the optical unit 2 move in respect to an orthogonal direction) in view of Tsunoda (Column 8, Lines 27-31, Fig 7 Elements 62a, 62b, 65a, 65b) further discloses wherein a plurality of said sliding members that are provided at respective end

portions of said optical unit with respect to a direction orthogonal to a moving direction of the optical member respectively.

Claim 9, Masuda (Fig. 18B and 18C) in view of Tsunoda (Fig 11, Element 111b) "wherein said plastically deformable screw portion provided over such a length that enables adjustment of a position of the optical means by adjusting an engagement position of the screw portion and the screw hole portion" reads on Masuda's and Tsunoda's adjustment of the position of the optical means.

Claim 10, Masuda (Col. 3 Lines 45-60, Fig. 23) in view of Tsunoda discloses an illuminating unit configured to illuminate the original on the original placement portion, wherein the optical unit **(Fig. 23 El. 369)** has a mirror **(Fig. 23 El. 366)** configured to reflect a reflection light from the original that is illuminated with the illuminating unit **(Fig. 23 El. 369).**

Claim 11, "the optical unit has a frame portion configured to hold an and a position of the frame portion relative to the guide member is adjusted by the rotating of the screw portion of the sliding member" reads on Fig. 18C since it shows the adjustment of the optical unit.

Response to Applicant's argument

Objection to Drawings

The Examiner requires applicant to change the numerical label; i.e. Element. 112 of Fig. 4 should be relabeled as "Mirror". This applies to all numerical elements of all drawings.

New grounds of Rejection

2. Applicant's arguments filed 12/03/2007 have been fully considered but they are not persuasive.

With respect to applicant's argument that member 119 of Tsunoda does not make the sliding member contact with the guide member has been considered.

In reply: Masuda teaches that the guide member and the sliding member is hold together by a spring. (Col. 6 Lines 22-35). Masuda does not disclose both a screw and a screw hole portion.

Tsunoda teaches a screw used as a stopping member. (Col. 7 Lines 25-30). Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to modify Masuda's technology of holding the sliding and the guide members with spring to include both a screw and screw hole members so that there will not be any loose contact between the sliding and the guide members as taught by Tsunoda Col. 11, Lines 39-45.

Applicant further argues that the fact that the inner peripheral surfaces of holes are plastically deformable and therefore makes the structure different from his invention.

In reply: Tanaka discloses a technology that teaches that a screw fastens two objects together in other to avoid looseness (Col. 4 Lines 53-61). Applicant admit in his specification that looseness causes deterioration of the geometric characteristics of the read images (Murakami: Section 0077). Consquently applicant solve this problem by using a screw and a screw hole portion to hold the sliding and guide member together to avoid looseness. Therefore since the screw portion in Tanaka and that of the applicant solve the same it will obvious to modify Masuda's spring with a screw taught by Tsunoda.

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

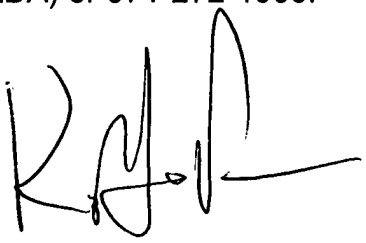
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKWASI M. SARPONG whose telephone number is (571)270-3438. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMS
02/05/2008



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